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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,176	02/01/2002	Richard E. Rowe	IGT1P048/P-537	2727
79546 7590 08/08/2008 Weaver Austin Villeneuve & Sampson LLP - IGT Attn: IGT P.O. Box 70250 Oakland, CA 94612-0250				
EXAMINER DURAN, ARTHUR D				
ART UNIT		PAPER NUMBER		
3622				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/066,176

Applicant(s)

ROWE ET AL.

Examiner

Arthur Duran

Art Unit

3622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date 7/9/08
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claims 1-28 have been examined.

Response to Amendment

The Amendment filed on is 7/9/08 is insufficient to overcome the prior rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claims 1-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dandurand ("Market Niche Analysis In the Casino Gaming Industry", Journal of Gambling Studies, Vol. 6(1), Spring 1990) in view of Sheppard (US 6,026,397).**
2. Regarding claims 1, 18, 21, 24, and 27, Dandurand teaches of analyzing casino customers and segmenting them into groups and sub-groups. (Page 78). Dandurand gives an example where by customers are first grouped based on their "Slot Gaming Budget." (Page 82, Table 1). Then, players with a budget greater than \$500 are further sub-divided based on other attributes. (Page 83, Table 2). After a target player is identified, offers and benefits are conferred to those who fall within that segmentation. (Page 84). Dandurand teaches that the data is taken from a database (i.e. queried). (Page 81).

Regarding claim 1, 14-15, 18, 21, 24, and 27, Dandurand does not explicitly teach that this method is accomplished using a computer, however, Dandurand teaches of Management Information Systems (MIS) functions of the enterprise. (Page 84). MIS is a computer system designed to help managers plan and direct business and organizational operations. (Dictionary.com).

3. Regarding claims 14-15, 18, 21 and 24, Dandurand does not explicitly teach that this method is accomplished using a computer, however, Dandurand teaches of Management Information Systems (MIS) functions of the enterprise. (Page 84). MIS is a computer system designed to help managers plan and direct business and organizational operations. (Dictionary.com). An automatic means to replace a manual activity which accomplished the same result is not sufficient to distinguish over the prior art. *In re Venner*, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958). Additionally, applicant teaches that it is already common for data to be collected and searched in "database queries". (Specification, Page 2). See MPEP § 2144.04.

4. Alternatively, Sheppard teaches of a method for using a computer to segment databases into groups and sub-groups. (Abstract).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have used a computer to automate the data analysis that Dandurand teaches. One would have been motivated to do so in order to save time and to take advantage of the computing power of a computer.

Additionally, Dandurand teaches of analyzing database information in order to segment various customers in a casino. (Page 81). The database contains information

relating to the customers preferences and gaming behavior. (Page 81-82). Based on the customer's preferences (as well as other variables), customers are segmented into groups and sub-groups. (Fig. 1; Page 78). These groups and sub-groups allow for the determination of target market customers and the creation of targeted marketing programs. (Pages 80-81). Dandurand gives an example of this iterative segmentation in use. First customers are segmented based on their "slot gaming budget." (Table 1; Pages 81-82). Thereafter, customers are further segmented based on various other factors, such as gender, age, race, etc. (Table 2; Pages 83-84). After a target player is identified, offers and benefits are conferred to those who fall within that segmentation. (Page 84). Therefore, Dandurand gives an example of an iterative method of obtaining customer data from a database, segmenting customers based on various variables, and providing offers and benefits to those customers that are identified.

Additionally, Dandurand discloses a variety of attributes that can be analyzed for targeting (page 83 table 2) and that particular attributes (zip code) can be further analyzed and that different clusters can be arrived at and that filtering can be performed based on combination of additional variables.

Dandurand does not explicitly disclose that single variables are analyzed for different cluster determining.

However, Sheppard discloses that numerous clusters for targeting can be determined (Figures 9a, 9b) and that cluster refinement can be performed in an iterative process with further cluster analysis and filtering (Figure 8) and that different variables can be analyzed at different levels of refinement and association with similar or

dissimilar neighboring clusters (Figure 9b). And, Sheppard discloses that clusters can be analyzed and assessed based on anywhere from a single variable to all variables or anywhere between (Figures 12, 13). Notice in Figure 12 that a cluster can be defined for 4 of the 97 possible parameters. And, notice in Figure 12 that anywhere from 1 to 97 of the possible variables can be utilized for targeting, cluster analysis, and cluster determining. Hence, Sheppard discloses advanced cluster, group, and subgroup determining for targeting purposes. And, notice that Sheppard discloses that the cluster analysis can be iterative and continual to find numerous possible target groups and subgroups.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add Sheppard's further targeting variable analysis to Dandurand's targeting variable analysis. One would have been motivated to do this in order to better determine target groups and better target users.

Also, Sheppard discloses that different promotions may be presented to the different target groups (col 2, lines 21-20; col 2, lines 44-52).

Additionally, Dandurand does not explicitly disclose a player tracking system from which user attributes can be received.

However, the combination of the prior art renders obvious a player tracking system from which user attributes can be received.

Applicant's Specification states that a player tracking system is obvious, old, and well known:

"The management and analysis of data has long been important to many industries. As such many methodologies have been developed over the years that are oriented towards utilizing the relational aspects of collected data and data presentation for a variety of applications. The gaming industry is among those industries where the analysis of collected data is extremely important to optimizing marketing campaigns that directly affect the company's bottom line. Within the gaming industry data are collected as players play games on the casino floor. These data are commonly referred to as player tracking information. This player tracking information is combined together with fundamental player related data elements such as city/state, age, income, etc., to form player data relationships. Using these player data relationships, casinos can combine the data collected from tracking the game play of specific players and target those players with specific marketing campaigns organized in an attempt to increase revenue for the casino" ("Background of the Invention", pages 1-2).

And, Dandurand discloses four obvious methods for collecting data to profile the user, "The Observation Approach", "The Probing Approach", "The Deductive Approach", "the A Priori Approach". (Dandurand, page 79, Figure 2) and that "the purpose of this deductive approach, or any of the other approaches (such as observation, probing, or priori), is to produce a basis for identifying a unique set of preferences for one or more consumers in the target market." Dandurand further states that the observation approach is "market analysts can observe behavior of the target market customers. They will be searching for any differences that might be related to unique target market customers and to unique preferences" (page 78-79).

And, Dandurand's disclosure is oriented towards gaming and casinos, "Market Niche Analysis In the Casino Gaming Industry".

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made that Dandurand can use the obvious, old, and well known user information gathering or player tracking system of the Applicant's Background to collect data for use with Dandurand's observation and deduction methods for determining target niches.

And, it would have been obvious to one having ordinary skill in the art at the time of the invention to combine the features since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. Or, it is obvious because it is a use of a known technique to improve similar methods in the same way. Or, it is obvious to try, choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success is obvious to try.

Hence, the combination of the prior art renders these features of the Applicant's claims obvious.

5. Regarding claim 2, in the example given by Dandurand, the customers are sorted based on their "slot gaming budget." Those who have a budget greater than \$500 are placed in the group "premium" which is then further segmented.
6. Regarding claim 3, applicant teaches that the "query" attribute that is used to create the "first subset" is part of the "selected attributes." The query attribute in claim 2

is used to create a "first subset" whereby all individuals in this group have at least the "query attribute." However, applicant states in claim 1 that the "selected attributes" are compared in order to determine a "difference" between individuals. It is unclear to the examiner how it would be possible to have a query attribute that is used to find similar individuals also be in the group of attributes that is used to find "difference[s]" between individuals.

7. Regarding claim 4, Dandurand's first sorts the data based on "Slot Gaming Budget." (Page 82). Dandurand then compares the individuals in a specific category based on other attributes, none being "Slot Gaming Budget." (Page 83).

8. Regarding claim 5, applicant teaches of defining a "gaming DNA". Applicant teaches that a "gaming DNA" for an individual is "any subset of the attributes stored in the system's player tracking database." (Specification, Page 14). Dandurand teaches creating user profiles with selected variables. (Page 82)

9. Regarding claims 6-8, applicant teaches that the attributes of the "gaming DNA" can be equal to, more than or less than the "selected attributes." Applicant teaches that the DNA may "vary from analysis to analysis." (Specification, Page 14). The DNA may be "redefined each time the player tracking database is mined." (Id.). Dandurand does not explicitly teach every possibility, however, Dandurand teaches that the profile is composed of selected variables. (Page 82) Dandurand further teaches that the profile could be expanded into a "richer profile" with more variables or could be reduced to focus on a niche. (Page 83, 84).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have created the user profile with any number of user attributes. One would have been motivated to do so in order to expand or reduce the "niche" market.

10. Regarding claim 9, Dandurand teaches of a target market strategy on the segmented groups. (Page 74).

11. Regarding claim 10, applicant teaches that the marketing strategy comprises "identifying at least one single relational polymorphism" between the subsets. Applicant teaches that a "single relational polymorphism" is an attribute which is different for a subset of individuals. (Specification, Page 17). Dandurand teaches of a similar method whereby the marketing strategy is focused on specific sub-groups, or "niche markets." (Page 83). These "sub-groups" share the same parent group; in this case, budgets greater than \$500.

12. Regarding claim 11 and 13, Dandurand teaches of similar attributes. (Page 83, Table 2).

13. Regarding claim 12, and 17, Dandurand teaches a similar method of using "Las Vegas Visitor Profile" as the database that consists of players gambling in Las Vegas. (Page 82).

14. Regarding claim 16, 17, 19, 20, 22, 23, 25, and 26, Dandurand teaches of similar tracking data, such as average bet at electronic slots. (Page 83).

Claim 28: See claim 1. Also, Applicant's Specification says that it is old and well known that, " Within the gaming industry data are collected as players play games on

the casino floor. These data are commonly referred to as player tracking information." (page 1, 2). And, Sheppard discloses a network and collecting data and presenting data to a server/database for analysis (Fig. 1) and throughout the Sheppard Specification. Hence, it is obvious that casino game play data from specific games can be connected to a central database/server. Please see the motivation from claim 1.

Response to Arguments

15. Applicant's arguments filed 3/17/2008 have been fully considered but are not found persuasive.

On page 11 of the Remarks dated 7/9/2008, Applicant states, "Specifically, neither Dandurand nor Sheppard, considered alone or in combination, describe or suggest "comparing the selected attributes associated with each of the first subset of the individuals with the selected attributes associated with others of the first subset of individuals to determine at least one difference among the plurality of attributes according to which the first subset of individuals may be divided into further subsets of the individuals, the at least one difference determined based on the plurality of attributes received via the player tracking system" as recited in claim 1."

However, as noted in the rejection dated 4/9/2008, the combination of the prior art renders obvious the features of comparing the selected attributes associated with each of the first subset of the individuals with the selected attributes associated with others of the first subset of individuals to determine at least one difference among the

plurality of attributes according to which the first subset of individuals may be divided into further subsets of the individuals.

Additionally, Dandurand teaches of analyzing database information in order to segment various customers in a casino. (Page 81). The database contains information relating to the customers preferences and gaming behavior. (Page 81-82). Based on the customer's preferences (as well as other variables), customers are segmented into groups and sub-groups. (Fig. 1; Page 78). These groups and sub-groups allow for the determination of target market customers and the creation of targeted marketing programs. (Pages 80-81). Dandurand gives an example of this iterative segmentation in use. First customers are segmented based on their "slot gaming budget." (Table 1; Pages 81-82). Thereafter, customers are further segmented based on various other factors, such as gender, age, race, etc. (Table 2; Pages 83-84). After a target player is identified, offers and benefits are conferred to those who fall within that segmentation. (Page 84). Therefore, Dandurand gives an example of an iterative method of obtaining customer data from a database, segmenting customers based on various variables, and providing offers and benefits to those customers that are identified.

Additionally, Dandurand discloses a variety of attributes that can be analyzed for targeting (page 83 table 2) and that particular attributes (zip code) can be further analyzed and that different clusters can be arrived at and that filtering can be performed based on combination of additional variables.

And, Sheppard discloses that numerous clusters for targeting can be determined (Figures 9a, 9b) and that cluster refinement can be performed in an iterative process

with further cluster analysis and filtering (Figure 8) and that different variables can be analyzed at different levels of refinement and association with similar or dissimilar neighboring clusters (Figure 9b). And, Sheppard discloses that clusters can be analyzed and assessed based on anywhere from a single variable to all variables or anywhere between (Figures 12, 13). Notice in Figure 12 that a cluster can be defined for 4 of the 97 possible parameters. And, notice in Figure 12 that anywhere from 1 to 97 of the possible variables can be utilized for targeting, cluster analysis, and cluster determining. Hence, Sheppard discloses advanced cluster, group, and subgroup determining for targeting purposes. And, notice that Sheppard discloses that the cluster analysis can be iterative and continual to find numerous possible target groups and subgroups.

And, as to the new features added 7/9/08 of "receiving the plurality of attributes regarding the individuals via a player tracking system. . .based on the plurality of attributes received via the player tracking system".

Examiner notes that it is the Applicant's claims as stated in the Applicant's claims that are being rejected with the prior art. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In interpreting claim language, the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art is applied, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description. See *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997). See also *In*

ream. Acad. of Sci. Tech. Ctr., 367 F.3d 1359, 1364 (Fed. Cir. 2004) and *In re Sneed*, 710 F.2d 1544, 1548 (Fed. Cir. 1983). Claims are given their broadest reasonable construction. See *In re Hyatt*, 211 F.3d 1367, 54 USPQ2d 1664 (Fed. Cir. 2000). It is Appellant's burden to precisely define the invention. See *In re Morris*, 127 F.3d 1048, 1056 (Fed. Cir. 1997).

And, the player tracking system in the Applicant's Specification is broadly defined and given various implementations and meanings throughout the Applicant's Specification. Applicant's Figure 1 is of a player tracking system. But, Applicant's Specification states that that is just one example and that there are many variations and manifestations and parts to a player tracking system. Hence, the player tracking system is not one device or item and, rather, is loosely and variably and broadly defined. Hence, a broad interpretation is given to a player tracking system.

And, Dandurand does not explicitly disclose a player tracking system from which user attributes can be received.

However, the combination of the prior art renders obvious a player tracking system from which user attributes can be received.

Applicant's Specification states that a player tracking system is obvious, old, and well known:

"The management and analysis of data has long been important to many industries. As such many methodologies have been developed over the years that are oriented towards utilizing the relational aspects of collected data and data presentation for a variety of applications. The gaming industry is among those industries where the

analysis of collected data is extremely important to optimizing marketing campaigns that directly affect the company's bottom line. Within the gaming industry data are collected as players play games on the casino floor. These data are commonly referred to as player tracking information. This player tracking information is combined together with fundamental player related data elements such as city/state, age, income, etc., to form player data relationships. Using these player data relationships, casinos can combine the data collected from tracking the game play of specific players and target those players with specific marketing campaigns organized in an attempt to increase revenue for the casino" ("Background of the Invention", pages 1-2).

And, Dandurand discloses four obvious methods for collecting data to profile the user, "The Observation Approach", "The Probing Approach", "The Deductive Approach", "the A Priori Approach". (Dandurand, page 79, Figure 2) and that "the purpose of this deductive approach, or any of the other approaches (such as observation, probing, or priori), is to produce a basis for identifying a unique set of preferences for one or more consumers in the target market." Dandurand further states that the observation approach is "market analysts can observe behavior of the target market customers. They will be searching for any differences that might be related to unique target market customers and to unique preferences" (page 78-79).

And, Dandurand's disclosure is oriented towards gaming and casinos, "Market Niche Analysis In the Casino Gaming Industry".

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made that Dandurand can use the obvious, old, and well

known user information gathering or player tracking system of the Applicant's Background to collect data for use with Dandurand's observation and deduction methods for determining target niches.

And, it would have been obvious to one having ordinary skill in the art at the time of the invention to combine the features since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. Or, it is obvious because it is a use of a known technique to improve similar methods in the same way. Or, it is obvious to try, choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success is obvious to try.

Hence, the combination of the prior art renders these features of the Applicant's claims obvious.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arthur Duran whose telephone number is (571)272-6718. The examiner can normally be reached on Mon- Fri, 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on (571) 272-6724. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Arthur Duran
Primary Examiner
Art Unit 3622

/Arthur Duran/
Primary Examiner, Art Unit 3622
8/5/2008